CHAPTER 2

Defense Acquisition Program Goals and Strategy

2.0. Overview

2.0.1. Purpose

The purpose of this chapter is to assist Program Managers in formulating the goals and developing the strategies required to manage their programs. Program goals serve as control objectives. The Acquisition Strategy describes the program managers plan to achieve these goals and summarizes the program planning and resulting program structure.

This chapter addresses the information required to comply with DoD Instruction 5000.2 Utilizing the capabilities of this "on-line" Guidebook, many topics are electronically linked to the related detailed discussions and explanations appearing elsewhere in this Guidebook or on the Internet.

2.0.2. Contents

Section 2.1 discusses program goals. An acquisition program and associated program goals result from the Joint Capabilities Integration and Development System determination to pursue a materiel solution to satisfy an identified capability need. Section 2.2 discusses the Technology Development Strategy, and Section 2.3 discusses the Acquisition Strategy leading to the achievement of the program goals.

2.1. Program Goals

Program goals are the minimum number of cost, schedule, and performance parameters necessary to describe program objectives. The discussion of program goals in this Guidebook is "*hot-linked*" to the discussion of Joint Capabilities Integration and Development System documentation in CJCS Instruction 3170.01, *Joint Capabilities Integration and Development System*, and CJCS Manual 3170.01, *Operation of the Joint Capabilities Integration and Development System*.

2.1.1. The Acquisition Program Baseline (APB)

To comply with 10 USC 2435 and 10 USC 2220, DoD Instruction 5000.2 requires every program manager to document program goals prior to program initiation. The Acquisition Program Baseline satisfies this requirement.

Program goals consist of an objective value and a threshold value for each parameter.

Objective values represent what the user desires and expects. The program manager manages the program to the objective value of each parameter.

Thresholds represent the acceptable limits to the parameter values that, in the user's judgment, still provide the needed capability. For performance, a threshold represents either a minimum or maximum acceptable value, while for schedule and cost parameters, thresholds would normally represent maximum allowable values. The failure to attain

program thresholds may degrade system performance, delay the program (possibly impacting related programs or systems), or make the program too costly. The failure to attain program thresholds, therefore, places the overall affordability of the program and/or the capability provided by the system into question.

The program manager derives the Acquisition Program Baseline from the users' performance requirements, schedule requirements, and best estimates of total program cost consistent with projected funding. The sponsor of a capability needs document (i.e., Capability Development Document or Capability Production Document) provides a threshold and an objective value for each attribute that describes an aspect of a system or capability to be developed or acquired. The program manager will use this information to develop an optimal product within the available trade space. If the objective and the threshold values are the same, the sponsor indicates this in the capability needs document by including the statement, "Threshold = Objective"

Acquisition Program Baseline parameter values should represent the program as it is expected to be developed, produced and/or deployed, and funded. The baseline should only contain those parameters that, if thresholds are not met, will require the Milestone Decision Authority to re-evaluate the program and consider alternative program concepts or design approaches. The number of performance parameters should be limited to provide maximum trade space.

Per 10 USC 2435, the Department of Defense may not obligate funds for major defense acquisition programs after entry into System Development and Demonstration without a Milestone Decision Authority-approved baseline unless the Under Secretary of Defense for Acquisition, Technology, and Logistics specifically approves the obligation. DoD Instruction 5000.2 extends this policy to Acquisition Category IA programs. For an Acquisition Category IA program, the Assistant Secretary of Defense for Networks and Information Integration must approve the obligation.

2.1.1.1. APB Management and Content

The Joint Staff (J-8) will review the cost, schedule, and key performance parameter objective and threshold values in the Acquisition Program Baseline for Joint Requirements Oversight Council (JROC) Interest programs, and any other programs of significant joint interest (as determined by the J-8).   The J-8 review will ensure that the objective and threshold values are consistent with the JROC-approved Capability Development Document, the Capability Production Document, and prior JROC decision(s). The review will also ensure that the baseline provides the necessary warfighting capabilities affordably and within required time frames. (See also CJCS Instruction 3170.01.)

Performance. The total number of performance parameters should be the minimum number needed to characterize the major drivers of operational performance. Performance parameters should include the key performance parameters identified in the capability needs document(s) (i.e., Capability Development Document and Capability Production Document), and the values and meanings of thresholds and objectives should be consistent. (See also CJCS Instruction 3170.01D.)

The number and specificity of performance parameters may change over time. Early in a program, the Acquisition Program Baseline should reflect broadly defined, operational-level measures of effectiveness or measures of performance to describe needed capabilities. As a program matures, system-level requirements become better defined. The Milestone Decision Authority may also add performance parameters to the Acquisition Program Baseline other than the JROC-validated key performance parameters.

Schedule. Schedule parameters should include, as a minimum, the projected dates for program initiation, other major decision points, and initial operating capability. The Capability Development Document and Capability Production Document program summaries describe the overall program strategy for reaching full capability, and the timing of the delivery of each increment. The program manager may propose, and the Milestone Decision Authority may approve, other, specific, critical, system events.

Cost. Cost figures should reflect realistic cost estimates of the total program and/or increment. The Capability Development Document and Capability Production Document include a program affordability determination identified as life-cycle cost or, if available, total ownership cost. Budgeted amounts should never exceed the total cost thresholds (i.e., maximum costs) in the Acquisition Program Baseline. As the program progresses, the program manager can refine procurement costs based on contractor actual (return) costs from Technology Development, System Integration, System Demonstration, and Low-Rate Initial Production. The program manager should provide the refined estimates whenever updating the Acquisition Program Baseline.

For Acquisition Category IA programs, Acquisition Category I cost parameters apply with the addition of military pay and the cost of acquisition items procured with Defense Working Capital Funds.

The Acquisition Program Baseline should contain cost parameters (objectives and thresholds) for major elements of program life-cycle costs (or total ownership costs, if available), as defined in section 3.1. These elements include:

(1)   Research, development, test, and evaluation costs;

(2)   Procurement costs;

(3)   Military construction costs;

(4)   Acquisition-related operations and maintenance costs (that support the production and deployment phase), if any;

(5)   Total system quantity (to include both fully configured development and production units);

(6)   Average unit procurement cost (defined as total procurement cost divided by total procurement quantity); (Note: This item and number 7 below do not usually apply to business IT systems.)

(7) Program acquisition unit cost (defined as the total of all acquisition-related appropriations divided by the total quantity of fully configured end items); and

(8) Any other cost objectives established by the milestone decision authority. If system operating and support costs are included, they are normally expressed as annual operating and support costs per deployable unit (e.g., squadron or battalion) or individual system (e.g., ship), as appropriate.

The cost parameters are presented in base year dollars.

2.1.1.2. Acquisition Program Baseline in an Evolutionary Acquisition

Programs using an evolutionary acquisition strategy should design the Acquisition Program Baseline consistent with the sponsor's capability document(s) and the applicable approach outlined in Table 2.1.1.2.1.

Capability Development Document (CDD) or Capability Production Document (CPD)	Acquisition Program Baseline (APB)
CDD defines multiple increments of capability	APB contains multiple sets of parameter values, each set defining an increment
CDD incrementally updated and revalidated	APB values incrementally updated
Separate CDDs for each increment	Separate APBs for each increment
There is one CPD for each production increment	The corresponding APB should be updated to reflect the parameters in the CPD for that production increment

Table 2.1.1.2.1. APB Parameters under an Evolutionary Acquisition Strategy.

DoD Instruction 5000.2 requires the Milestone Decision Authority to formally initiate each increment of an evolutionary acquisition program. Program initiation may occur at Milestone B or C. Therefore, the program manager should develop goals for each program increment. Planned program goals (parameters and their values) for any program may be refined, according to the actual results demonstrated by the program.

2.1.1.3. APB Approval

The program manager, in coordination with the user/sponsor, prepares the Acquisition Program Baseline for program initiation. The program manager revises the Acquisition Program Baseline for each milestone review, and in the event of program restructurings or unrecoverable program deviations.

The Acquisition Program Baseline requires the concurrence of the Program Executive Officer for all acquisition category programs, and the concurrence of the Component Acquisition Executive for Acquisition Category ID and IAM programs.

For Acquisition Category I and IA programs, the Acquisition Program Baseline will be coordinated with the Under Secretary of Defense (Comptroller) (10 USC 2220 and DoD Instruction 5000.2) prior to Milestone Decision Authority approval. For Joint

Requirements Oversight Council Interest Programs, the Acquisition Program Baseline must also be coordinated with the Joint Staff (J-8 or designee) prior to Milestone Decision Authority approval (CJCSI 3170.01).

2.1.2. Trade-Offs

Maximizing program manager and contractor flexibility to make cost/performance trade-offs is essential to achieving cost objectives. The program manager may treat the difference between an objective and its associated threshold as a "trade space," subject to agreement by the user.

The best time to reduce total ownership cost and program schedule is early in the acquisition process. Continuous cost/schedule/performance trade-off analyses can help attain cost and schedule reductions.

Cost, schedule, and performance may be traded within the "trade space" between the objective and the threshold without obtaining Milestone Decision Authority approval. Trade-offs outside the trade space (i.e., decisions that result in acquisition program parameter changes) require approval of both the Milestone Decision Authority and the capability needs approval authority. Validated key performance parameters may not be traded-off without approval by the validation authority. The program manager and the user should work together on all trade-off decisions.

2.2. Pre-Systems Acquisition: Technology Development Strategy

2.2.1. Technology Development

The acquisition framework incorporates a Technology Development Phase focused on the development, maturation, and evaluation of the technologies needed for the capability under consideration. Phase activities concentrate on maturing those technologies (consistent with recommended Technology Readiness Levels) and demonstrating readiness to proceed with program initiation. The Technology Development Phase ends when the Milestone Decision Authority determines that technologies are sufficiently mature. This determination, along with the satisfaction of other statutory and regulatory requirements, supports program initiation.

2.2.2. Required Information

The Technology Development Strategy focuses specifically on the activities of the Technology Development Phase. Where feasible, the Technology Development Strategy should also discuss activities associated with the post-program-initiation phases of the planned acquisition.

The Technology Development Strategy precedes the formal Acquisition Strategy and is required for Milestone A. The Technology Development Strategy is updated at subsequent milestones and subsumed into the Acquisition Strategy. If the Acquisition Strategy is approved at Milestone A, the Technology Development Strategy may be included in the Acquisition Strategy. While there is no mandatory format for the Technology Development Strategy, Public Law 107-314, Section 803, requires the following minimum content:

- A discussion of the planned acquisition approach, including a summary of the considerations and rationale supporting the chosen approach. For the preferred, evolutionary acquisition approach, whether spiral or incremental, DoD Instruction 5000.2 requires the following details:
    - A preliminary description of how the program will be divided into technology spirals and development increments;
    - The limitation on the number of prototype units that may be produced and deployed during technology development;
    - How prototype units will be supported; and
    - Specific performance goals and exit criteria that must be met before exceeding the number of prototypes that may be produced under the research and development program.
- A discussion of the planned strategy to manage research and development. This discussion must include and briefly describe the overall cost, schedule, and performance goals for the total research and development program. To the extent practicable, the total research and development program should include all planned technology spirals or increments.
- A complete description of the first technology demonstration. The description must contain specific cost, schedule, and performance goals, including exit criteria, for the first technology spiral demonstration.
- A test plan. The program manager must describe how the first technology spiral demonstration will be evaluated to determine whether the goals and exit criteria for the Technology Development phase have been achieved. The test plan is focused on the evaluation of the technologies being matured during the Technology Development phase. This plan is distinct from the separately developed and approved Test and Evaluation Strategy discussed in detail in section 9.6.1 of this Guidebook. The Test and Evaluation Strategy takes a broader view and is the tool used to begin developing the entire program test and evaluation strategy, including the initial test and evaluation concepts for Technology Development, System Development and Demonstration, and beyond.

DoD Instruction 5000.2 requires that each increment of an evolutionary acquisition program have a Milestone Decision Authority-approved Technology Development Strategy. It suggests that multiple technology development demonstrations may be necessary before the user and developer agree that a proposed technology solution is affordable, militarily useful, and based on mature technology. The Instruction also requires that the Technology Development Strategy be reviewed and updated upon completion of each technology spiral and development increment, and that approved updates support follow-on increments.

2.3. Systems Acquisition: Acquisition Strategy

The Acquisition Strategy results from extensive planning and preparation and a thorough understanding of both the specific acquisition program and the general defense acquisition environment. Development of the acquisition strategy requires collaboration

between the Milestone Decision Authority, program manager, and the functional communities engaged in and supporting DoD acquisition. A well-developed strategy minimizes the time and cost required to satisfy approved capability needs, and maximizes affordability throughout the program life-cycle. Consistent with DoD Directive 5000.1, the program manager shall be the single point of accountability for accomplishing program objectives for total life-cycle systems management, including sustainment. The charge of DoD executive leadership is to use common sense and sound business practice in developing the acquisition strategy and executing the program. The program manager should organize an Integrated Product Team to assist in development and coordination of the Acquisition Strategy.

When developing the acquisition strategy, the program manager and supporting team members should keep in mind their total systems responsibility. A complete discussion of Total Life Cycle Systems Management, consistent with the policy direction of DoD Directive 5000.1, appears later in this Guidebook.

Consistent with statute and regulation, the program manager should tailor the program planning and required information to the specific program needs. Additionally, the needs of the decision makers who will coordinate or approve the strategy should guide the preparation of the acquisition strategy. 2.3.1. lists the principal considerations associated with developing the acquisition strategy.

Acquisition Strategy Considerations	Acquisition Approach	Modular Open Systems Approach
	Best Practices	
	Business Considerations	Product Support
	Capability Needs Summary	Program Structure
	Environment, Safety, Occupational Health	Relief, Exemption, and Waiver
	Human Systems Integration	Research and Technology Protection
	Information Assurance	
	Information Technology	Resource Management
	Integrated Test and Evaluation	Risk Management
	Interoperability	Systems Engineering

Table 2.3.1. Acquisition Strategy Considerations

DoD Instruction 5000.2, requires an approved Acquisition Strategy at program initiation. The acquisition strategy should be updated for all subsequent major decisions and program reviews, and whenever the approved strategy changes.

An acquisition strategy requires the concurrence of the Program Executive Officer (for programs in all acquisition categories) and the DoD Component Acquisition Executive (for Acquisition Category ID and IAM programs) prior to approval by the Milestone Decision Authority. Milestone Decision Authority approval of the Acquisition Strategy may precede a decision point; however, programs may not proceed beyond a decision point without a Milestone Decision Authority-approved strategy.

This section of the Guidebook covers *all* of the topics or activities the program manager *should* consider when developing a strategy. However, when tailored for a specific program, some topics may not apply. This Guidebook will identify the mandatory topics or practices, consistent with statute and regulation, with which the program manager must comply when planning the program, and indicate the information the program manager must include in the documented acquisition strategy.

2.3.1. Program Structure

The Acquisition Strategy guides program execution across the entire program life-cycle. The strategy evolves over time and should continuously reflect the current status and desired end point of the program. The strategy must be flexible enough to accommodate acquisition oversight decisions both on this program and on other programs that may affect this program. It should address the availability of required capabilities to be provided by other programs.

The Acquisition Strategy establishes the milestone decision points and acquisition phases planned for the program. The strategy should cover development, testing, production, and life-cycle support. It should prescribe the accomplishments for each phase, and identify the critical events affecting program management. The Acquisition Strategy should include a summary of the Integrated Master Plan and Integrated Master Schedule.

If the program manager decides to incorporate concurrency in the program, the Acquisition Strategy should discuss the benefits and risks of the concurrency and address the resultant risk mitigation and testing impacts.

2.3.1.1. Before Program Initiation

Pre-program-initiation activities may directly impact the acquisition strategy. Since this may precede the appointment of a program manager, the engaged DoD Components and other organizations, like the Office of the Director, Defense Research and Engineering, should consider the effect of "Pre-Systems Acquisition" activities on any future DoD acquisition program and the associated acquisition strategy that may evolve from their efforts. These organizations should plan for transition to the formal acquisition process and be prepared to communicate background information to the program manager. Once assigned, the program manager should capitalize on the transition planning and form a Working-Level Integrated Product Team to develop the acquisition strategy.

2.3.1.2. Tailoring

Consistent with statutory and federal regulatory requirements, the program manager and Milestone Decision Authority may tailor the phases and decision points for a program to

meet the specific needs of the program. Tailoring should consider program category, risk, urgency of need, and technology maturity.

The acquisition strategy, prepared by the program manager and approved by the Milestone Decision Authority, ties all the acquisition activities together, forming the basis for sound program management. Tailored to the specific program, the strategy defines the entities, activities, and information requirements that will enable successful management and provide a program structure that will deliver timely and affordable capability to the users. Appropriately tailored information requirements support both decision making and provide a historical record of the program's maturation, management, and decision processes.

2.3.2. Acquisition Approach

The Acquisition Strategy defines the approach the program will use to achieve full capability: either evolutionary or single step; it should include a brief rationale to justify the choice. The DoD preference is evolutionary acquisition. When a program uses an evolutionary acquisition strategy, each increment should have a specific set of parameters with thresholds and objectives appropriate to the increment.

In an evolutionary approach, the Acquisition Strategy should fully describe the initial increment of capability (i.e., the initial deployment capability), and how it will be funded, developed, tested, produced, and supported. The Acquisition Strategy should preview similar planning for subsequent increments, and identify the approach to integrate and/or retrofit earlier increments with later increments.

If the capability documents do not allocate increments of capability (leading to full capability) to specific program increments consistent with an evolutionary approach, the program manager should work closely with the user/sponsor to determine whether an evolutionary acquisition approach will serve the user/sponsor needs. Where necessary and acceptable to the user/sponsor, the approval authority should modify the capability documents.

The approved Acquisition Strategy should address the proposed management approach to be used to define both the capability and the strategy applicable to each increment. This discussion should specifically address whether end items delivered under early increments will be retrofitted with later increment improvements.

The Acquisition Strategy defines the management approach that will achieve program goals. The information included in the Acquisition Strategy should be complete enough to fully describe the planning considerations and decisions. Because the Acquisition Strategy establishes such essential aspects of a program as the degree of competition, contract type, and incentive arrangements, the Acquisition Strategy should be approved before a synopsis is published, a Justification and Approval is approved, or negotiations undertaken.

2.3.3. Capability Needs

To provide context, the acquisition strategy should contain a summary description of the capability the acquisition is intended to satisfy or provide. The summary should highlight system characteristics driven by interoperability and/or joint integrated architectures,

capability areas, and families or systems of systems. The summary should also identify any dependency on the planned or existing capability of other programs or systems.

The summary should state whether the approved capability need is structured to achieve full capability in time-phased increments or in a single step. For time-phased capabilities, define the initial increment, as well as subsequent increments.

The acquisition strategy should identify the approved documents that define the requisite capability. These would include the Initial Capabilities Document and Capability Development Document.

The strategy should also briefly describe the status of draft capabilities documents. The strategy should identify significant aspects of the capability or capability area that are unsettled, and anticipate how this uncertainty could impact the acquisition strategy.

2.3.4. Test and Evaluation

Consistent with the direction of DoD Instruction 5000.2, the program manager must integrate test and evaluation throughout the acquisition process. The program manager should engage the Test and Evaluation Working-Level Integrated Product Team in the development of the acquisition strategy, and harmonize the acquisition strategy and the Test and Evaluation Strategy. The organizations managing the pre-Milestone B activities should be aware of the requirement in DoD Instruction 5000.2 that requires a Test and Evaluation Strategy for the Milestone A decision.

2.3.5. Risk Management

The program manager should establish a risk management process consistent with section 4.2.3.5., and summarize the process in the Acquisition Strategy. Effective risk management depends on the knowledge gleaned from all aspects of the program. *Knowledge reduces risk.* Risk management is a principal factor in the renewed and increased emphasis on *demonstration* evident in DoD Instruction 5000.2.

2.3.6. Resource Management

The acquisition strategy should address the estimated program cost and the planned program funding, including funding under an evolutionary acquisition strategy and advance procurement.

2.3.6.1. Funding Under an Evolutionary Acquisition Strategy

If an evolutionary approach is being used, the acquisition strategy should fully describe and fully fund the first increment of capability at program initiation. Funding of subsequent increments should be discussed to the extent the additional capability increments can be described. If the capability documents include a firm definition of the capability to be provided, by increment, the acquisition strategy should fully discuss the funding of each subsequent increment. Section 3.1.4. provides additional information on program funding under an evolutionary acquisition strategy.

2.3.6.2. Advance Procurement

DoD 7000.14-R requires that the procurement of end items be fully funded, i.e., the cost of the end items to be bought in any fiscal year must be completely included in that year's budget request. However, there are times when it is appropriate to procure some components, parts, materiel, or effort in advance of the end item buy. These items are referred to as advance procurements. Statutory authority for these advance procurements must be provided in the relevant authorization and appropriations acts.

Advance procurement funds are used in major acquisition programs for advance procurement of components whose long-lead times require purchase early in order to reduce the overall procurement lead-time of the major end item. Advance procurement of long lead components is an exception to the DoD "full funding" policy and must be part of the President's budget request. These expenditures are subject to the following limitations:

1. The cost of components, material, parts, and effort budgeted for advance procurement should be low compared to the total cost of the end item;

2. The program manager judges the benefits of the advance procurement to outweigh the inherent loss of or limitation to future Milestone Decision Authority flexibility;

3. The Milestone Decision Authority approves the advance procurement; and

4. The procurement received statutory authority, as discussed above.

As part of the milestone review, the Milestone Decision Authority should approve specific exit criteria for advance procurement. These specific exit criteria should be satisfied before the program manager releases any advance procurement funding for either the initial long lead-time items contract(s) or the contract(s) for individual, follow-on, long lead-time lots. The contracts office should initiate a separate contract action for advance procurement of long lead materiel.

2.3.7. Systems Engineering Plan

All programs responding to a capabilities or requirements document, regardless of acquisition category, shall apply a robust systems engineering approach and shall develop a Systems Engineering Plan for Milestone Decision Authority approval in conjunction with each milestone review, and integrated with the Acquisition Strategy. (Acting Under Secretary of Defense for Acquisition, Technology, and Logistics policy memorandum)

The Systems Engineering Plan documents a program's systems engineering strategy early in the program definition stages and is updated periodically as a program matures. The Systems Engineering Plan describes a program's overall technical approach, including processes, resources, and metrics, and applicable performance incentives. The plan should address both government and contractor systems engineering activities across the program's life cycle. It should describe the systems engineering processes to be applied, the approach to be used to manage the system technical baseline, and how systems engineering will be integrated across the integrated product team structure. It should also detail the timing, conduct, entrance criteria, and success/exit criteria of technical reviews. Chapter 4 of this Guidebook provides additional systems engineering implementation guidance.

The plan should address how performance measures for program control will complement the design, development, production, and sustainment efforts to provide the necessary Milestone Decision Authority-level management insights to support the acquisition decision process. Integration and linkage with other program management control efforts such as integrated master plans, integrated master schedules, technical performance measures, and earned value management is fundamental to successful application.

There is no prescribed format for the Systems Engineering Plan. However, the plan should address how systems engineering will support the translation of system capability needs into a technical and system effective, suitable product that is sustainable at an affordable cost. Specifically, a well-prepared Systems Engineering Plan will address the integration of the technical aspects of the program with the overall program planning, systems engineering activities, and execution tracking.

For Acquisition Category ID and IAM programs, DoD Components should submit the Systems Engineering Plan (integrated with the Technology Development Strategy or acquisition strategy) to the Director, Defense Systems, at least 30 days before the scheduled Defense Acquisition Board or Information Technology Acquisition Board milestone review.

2.3.8. Interoperability

The Acquisition Strategy should describe the treatment of interoperability requirements. For example, if an evolutionary acquisition strategy involves successive increments satisfying time-phased capability needs, the program manager should address each increment and the transitions from increment to increment. The Acquisition Strategy should identify any waivers or deviations that have been requested, obtained, or expected to be requested. The Strategy should reflect full compliance with the interoperability considerations discussed in 4.4.2. and, for Information Technology, including National Security Systems, 7.3. and 7.6.

- *Information Interoperability.* The program manager should identify and assess the impact of technical, schedule, cost, and funding critical path issues (i.e., issues that could impact the program manager's ability to execute the acquisition strategy) related to information interoperability. The program manager should also identify critical path issues in related program(s) (i.e., system(s) that will exchange information with the program manager's delivered system) and assess their potential impact.

- *Other-than Information Interoperability.* The program manager should identify and assess the impact of technical, schedule, cost, and funding critical path issues related to general interoperability concerns for the program manager's acquisition program. The program manager should also identify any critical path issues in other program(s) (i.e., system(s)) that will interoperate with or otherwise materially interact with the program manager's delivered system (e.g., fuel formulation and delivery systems, mechanical connectors, armament, or power characteristics) and assess their potential impact.

2.3.9. Information Technology

The Acquisition Strategy should summarize the Information Technology, including National Security Systems, infrastructure and support considerations identified in the appropriate capability document and described in the Information Support Plan (ISP). The Strategy should identify Information Technology, including National Security Systems, infrastructure enhancements required to support program execution. It should identify technical, schedule, and funding critical path issues for both the acquisition program and the Information Technology, including National Security Systems, infrastructure that could affect execution of the acquisition strategy. The Acquisition Strategy should describe support shortfalls and issues, and plans to resolve them. The Acquisition Strategy need not repeat the details found in the Information Support Plan, but should be consistent with the Information Support Plan and cross-reference it as practicable.

2.3.10. Research and Technology Protection

- *Protection of Critical Program Information.* The program manager should ensure that the Acquisition Strategy is consistent with the program protection measures of Chapter 8. The Acquisition Strategy should identify the technical, schedule, cost, and funding issues associated with protecting critical program information and technologies, and the plans to resolve the issues.

- *Anti-Tamper Measures.* The program manager should ensure the Acquisition Strategy is consistent with the anti-tamper measures of section 8.5.3. The program manager should plan and budget for post-production, anti-tamper validation of end items. The validation budget should not exceed $10 million (in FY 2001 constant dollars), and the duration of anti-tamper validation efforts should not exceed 3 years.

2.3.11. Information Assurance

The program manager should ensure that the Acquisition Strategy identifies the technical, schedule, cost, and funding issues associated with implementing information assurance. The planning for and documentation of the Acquisition IA Strategy should produce the information required for this section. Section 7.5.9.5 lists potential IA considerations to be included in the Acquisition Strategy.

2.3.12. Product Support Strategy

The program manager should develop a product support strategy for life-cycle sustainment and continuous improvement of product affordability, reliability, and supportability, while sustaining readiness. The support strategy is a major part of the Acquisition Strategy. The IPPD process helps to integrate the support strategy with the systems engineering processes.

The program manager should consider inviting Military Service and Defense Logistics Agency logistics organizations to participate in product support strategy development and integrated product teams.

The support strategy describes the supportability planning, analyses, and trade-offs used to determine the optimum support concept for a materiel system and identify the strategies for continuous affordability improvements throughout the product life cycle. The support strategy evolves in detail, so that by Milestone C, it defines how the program will address the support and fielding requirements necessary to meet readiness and performance objectives, lower total ownership cost, reduce risks, and avoid harm to the environment and human health. The support strategy should address how the program manager and other responsible organizations will maintain oversight of the fielded system. It should also explain the contracting approach for product support throughout the system Life cycle (see section 5.3.1 for additional detail). See the full description of program manager responsibilities regarding Life-Cycle Logistics and Product Support Strategy in Chapter 4 (section 4.1.3) and Chapter 5 (sections 5.1.1 and 5.1.3).

2.3.13. Human Systems Integration

The program manager should integrate manpower, personnel, training, human factors, safety and occupational health, personnel survivability, and habitability considerations into the acquisition process. HSI initiatives optimize total system performance and minimize total ownership cost. The acquisition strategy should identify HSI responsibilities, describe the technical and management approach for meeting HSI requirements, briefly summarize the planning for each of the above elements of HSI, and summarize major elements of the associated training system.

2.3.14. Environment, Safety, and Occupational Health (ESOH)

Per DoD Instruction 5000.2, the program manager shall prevent ESOH hazards, where possible, and manage ESOH hazards where they cannot be avoided. The acquisition strategy will include a summary of the Programmatic ESOH Evaluation (PESHE), including a strategy for integrating ESOH considerations into the systems engineering process; ESOH risks and risk mitigation efforts; and a compliance schedule for National Environmental Policy Act (NEPA) (42 U.S.C. 4321-4370d and Executive Order (E.O.) 12114).

2.3.15. Modular Open Systems Approach (MOSA)

MOSA is the Department of Defense implementation of "open systems." The program manager should incorporate MOSA principles into the acquisition strategy to ensure access to the latest technologies and products, and to facilitate affordable and supportable system development and modernization of fielded assets.

The program manager should plan for MOSA implementation and include a summary of such planning as part of the overall Acquisition Strategy and to the extent feasible, the Technology Development Strategy. The summary of the MOSA planning should describe (1) how MOSA fits into a program's overall acquisition process and strategies for acquisition, technology development, and T&E; (2) what steps a program will take to analyze, develop, and implement a system or a system-of-systems architecture based on MOSA principles; and (3) how such program intends to monitor and assess its MOSA implementation progress and ensure system openness.

If upon completing a business case analysis, the program manager decides to acquire a system with closed interfaces, the program manager must report to the Milestone Decision Authority, in context of the acquisition strategy, the justification for the decision. The justification should describe the potential impacts on the ability to access latest technologies from competitive sources of supply throughout the system life cycle, integrate the system with other systems in a joint integrated architecture venue, and to integrate and/or retrofit earlier increments with later increments in an evolutionary acquisition context.

2.3.16. Business Considerations

As part of the Acquisition Strategy, the program manager should develop a comprehensive business strategy. Figure 2.3.16.1 depicts the principal considerations in developing the business strategy.

Figure 2.3.16.1. Business Considerations

2.3.16.1. Competition

Competition is key to fostering innovation for defense applications. The Acquisition Strategy for all programs should describe the competition planned for all phases of the program's life cycle, or explain why competition is not practicable or not in the best interests of the Government. To promote synergies that facilitate competition and innovation, the program manager should, where feasible, identify other applications for the technologies in development within the functional capability areas identified by the Joint Staff.

2.3.16.1.1. Fostering a Competitive Environment

2.3.16.1.1.1. Competition Advocates

Per 41 U.S.C. 418 and 10 U.S.C. 2318 the Head of each DoD Component with acquisition responsibilities designates competition advocates for the DoD Component and for each procurement activity within the DoD Component. The advocate for competition for each procurement activity promotes full and open competition and promotes the acquisition of commercial items, and challenges barriers to such acquisition such as restrictive statements of need, detailed specifications, or burdensome contract clauses.

2.3.16.1.1.2. Ensuring Future Competition for Defense Products

For some critical and complex Defense products, the number of competitive suppliers is now, or will soon be, limited. While it is DoD policy to rely on the marketplace to meet Department materiel capability needs, there may be exceptional circumstances in which the Department needs to act to maintain future competition. Accordingly, the program manager, the Milestone Decision Authority, and the DoD Components should be open to and prepared for discussions considering the effects of their acquisition and budget plans on future competition.

The Deputies to CAEs routinely confer with the Deputy Under Secretary of Defense (Industrial Policy) (DUSD(IP)) to discuss areas where future competition may be limited and to provide the DUSD(IP) with information on such areas based on reporting from program managers and other sources. This group reviews areas that have been identified by program acquisition strategies, IPTs, sole-source Justifications and Approvals, and more generally from industry sources. Where appropriate, this group may establish a DoD team to evaluate specific product or technology areas. Based on analysis and findings of the team, the USD(AT&L) will decide what, if any, DoD action is required to ensure future competition in the sector involved. USD(AT&L) may direct any proposed changes in specific programs or may direct the Milestone Decision Authority to make such changes to a specific program.

2.3.16.1.2. Building Competition into Individual Acquisition Strategies

Program managers and contracting officers should provide for full and open competition, unless one of the limited statutory exceptions applies (FAR Subpart 6.3). Program managers and contracting officers should use competitive procedures best suited to the circumstances of the acquisition program. Program managers should plan for competition from the inception of program activity. Such competition planning should precede preparation of an acquisition strategy when, for example, a technology project or an effort involving advanced development or demonstration activities has potential to transition into an acquisition program. Competition planning should consider the immediate effort being undertaken and any foreseeable future procurement as part of an acquisition program. Competitive prototyping, competitive alternative sources, an open systems architecture, and competition with other systems that may be able to accomplish the mission should be used where practicable.

2.3.16.1.2.1. Applying Competition to Acquisition Phases

The acquisition strategy prepared to support program initiation should include the plans for competition for the long term. The strategy should be structured to make maximum use of competition throughout the life of the program. The intent of applying competition is to achieve performance and schedule requirements, improve product quality and reliability, and reduce cost.

2.3.16.1.2.2. Applying Competition to Evolutionary Acquisition

An evolutionary acquisition strategy is based on time-phased capabilities, and delivers an initial increment of capability and some number of subsequent increments until the full required capability is attained. Plans for competition should be tailored to each increment, and should consider successive increments. For example, if each increment adds a discrete capability, in a separable package, to a pre-established modular open system architecture, it may be possible and desirable to obtain full and open competition for each increment.

There is no presumption that successive increments must be developed or produced by the same contractor. The acquisition strategy should:

- Describe the plan for competition for the initial increment. State how the solicitation will treat the initial increment, and why. For example, the first increment may be:

  o A stand-alone capability, independent of any future procurements of subsequent increments;

  o The first in a series of time-phased capabilities, all of which are expected to need to be satisfied by the same prime contractor.

- State, for each successive increment, whether competition at the prime contract level is practicable, and why.

- When competition is practicable, explain plans for the transition from one increment to the next if there is a different prime contractor for each, and the manner in which integration issues will be addressed.

When competition is not planned at the prime contract level, the program manager should identify the FAR Part 6 reason for using other than full and open competition; explain how long, in terms of contemplated successive increments, the sole source is expected to be necessary; and address when and how competition will be introduced, including plans for bringing competitive pressure to bear on the program through competition at major subcontractor or lower tiers or through other means.

2.3.16.1.2.3. Competition and Source of Support

The DoD Directive 5000.1 policy on competition applies to source of support decisions. Specific competitive considerations include the following:

- The program manager should provide for the long-term access to data required for competitive sourcing of systems support throughout its life cycle.

- The source of supply support may be included in the overall system procurement or treated as a separate competition.

- The program manager should use sources of supply that provide for the most cost-effective system throughout its life cycle.

2.3.16.1.2.4. Industry Involvement

DoD policy encourages early industry involvement in the acquisition effort, consistent with the Federal Advisory Committee Act (FACA) and FAR Part 15. The acquisition strategy should address past and planned industry involvement. The program manager should apply knowledge gained from industry when developing the acquisition strategy; however, with the exception of the program manager's support contractors, industry should not directly participate in acquisition strategy development.

2.3.16.1.3.   Potential Obstacles to Competition

2.3.16.1.3.1. Exclusive Teaming Arrangements

Two or more companies create an exclusive teaming arrangement when they agree to team to pursue a DoD acquisition program, and agree not to team with other competitors for that program. These teaming arrangements occasionally result in inadequate competition for DoD contracts. While the Department's preference is to allow the private sector to team and subcontract without DoD involvement, the Department may intervene, if necessary, to assure adequate competition. Intervention to break up a team requires Milestone Decision Authority approval.

2.3.16.1.3.2. Sub-Tier Competition

All acquisition programs should foster competition at sub-tier levels, as well as at the prime level. The program manager should focus on critical product and technology competition when formulating the acquisition strategy; when exchanging information with industry; and when managing the program system engineering and life cycle.

Preparation of the acquisition strategy includes an analysis of product and technology areas critical to meeting program needs. The acquisition strategy should identify the potential industry sources to supply these needs. The acquisition strategy should highlight areas of potential vertical integration (i.e., where potential prime contractors are also potential suppliers). Vertical integration may be detrimental to DoD interests if a firm employs internal capabilities without consideration of, or despite the superiority of, the capabilities of outside sources. The acquisition strategy should describe the program manager's approach (e.g., requiring an open systems architecture, investing in alternate technology or product solutions, breaking out a subsystem or component, etc.) to establish or maintain access to competitive suppliers for critical areas at the system, subsystem, and component levels.

During early exchanges of information with industry (e.g., the draft request for proposal process), program managers should identify the critical product and technology areas that the primes plan to provide internally or through exclusive teaming. The program manager should assess the possible effects of these choices on competition, and mitigate

any potential loss of competition. If the assessment results in a change to the approved acquisition strategy, the program manager should propose the change to the Milestone Decision Authority.

As the program design evolves, the program manager should continue to analyze how the prime contractor is addressing the program's critical product and technology areas. This analysis may identify areas where the design unnecessarily restricts subsystem or component choices. Contractors should be challenged during requirements and design reviews to defend why planned materiel solutions for subsystem and component requirements critical to the program exclude other competitive choices. This monitoring should continue through the system life cycle (e.g., reprocurements, logistics support).

Similar reviews can be made after contract award. In accordance with FAR Subpart 44.2, Consent to subcontracts, program managers and contracting personnel have the right to review and approve or disapprove the make-buy decisions. These reviews should ensure decisions have considered better technical and cost effective solutions from other vendors.

2.3.16.1.4.   Potential Sources

The program manager should consider both international and domestic sources, that can meet the required need, as the primary sources of supply (consistent with relevant domestic preference statutes, FAR Part 25, and Defense Federal Acquisition Regulation Supplement Part 225). The program manager should consider national policies on contracting and subcontracting with small business (15 U.S.C. 644); small and disadvantaged business (15 U.S.C. 637); women-owned small business (15 U.S.C. 631); Historically Underutilized Business Zone (HUBZone) small business (15 USC 632); and Service-Disabled, Veteran-Owned small business (15 USC 657f); and address considerations to secure participation of these entities at both prime and sub-tier levels. The program manager should consider intra-Government work agreements, i.e., formal agreements, project orders, or work requests, in which one Government activity agrees to perform work for another, creating a supplier/customer relationship.

2.3.16.1.4.1. Market Research

Market research is a primary means of determining the availability and suitability of commercial items and the extent to which the interfaces for these items have broad market acceptance, standards-organization support, and stability. Market research supports the acquisition planning and decision process, supplying technical and business information about commercial technology and industrial capabilities. Market research, tailored to program needs should continue throughout the acquisition process and during post-production support. FAR Part 10 requires the acquisition strategy include the results of completed market research and plans for future market research. (See also CJCS Manual 3170.01A.)

2.3.16.1.4.2. Commercial Items

The program manager should work with the user to define and, if necessary, modify capability needs to facilitate the use of commercial items. This includes hardware,

software, interoperability, data interchange, packaging, transport, delivery, and automatic test systems. Within the constraints of the described capability needs, the program manager should require contractors and subcontractors to use commercial items to the maximum extent possible. While some commercial items may not provide system-level capabilities for Acquisition Category I and IA programs, numerous commercial components, processes, practices, and technologies have applicability to DoD systems. These considerations apply to subsystems, components, and spares based on the use of performance specifications and form, fit, function and interface specifications. The preference is to use commercial items. FAR Section 2.101 contains a definition of "commercial item." (See also section 4.4.5.)

The commercial marketplace widely accepts and supports open interface standards set by recognized standards organizations. These standards support interoperability, portability, scalability, and technology insertion. When selecting commercial items, the Department prefers open interface standards and commercial item descriptions. If acquiring products with closed interfaces, the program manager should conduct a business case analysis to justify acceptance of the potential economic impact on life-cycle cost and risk to technology maturation and insertion over the service life of the system.

2.3.16.1.4.3. Dual-Use Technologies

Dual-use technologies are technologies that meet a military need, yet have sufficient commercial application to support a viable production base. Market research and analysis helps to identify and evaluate possible dual-use technology and component development opportunities. Solicitation document(s) should encourage offerors to use, and the program manager should give consideration to, dual-use technologies and components. System design should facilitate the later insertion of leading edge, dual-use technologies and components throughout the system life cycle.

2.3.16.1.4.4. Use of Commercial Plants

Solicitation document(s) should encourage offerors to use commercial plants and integrate military production into commercial production as much as possible.

2.3.16.1.4.5. Industrial Capability

In many cases, commercial demand now sustains the national and international technology and industrial base. The following considerations will improve industry's capability to respond to DoD needs:

- Defense acquisition programs should minimize the need for new defense-unique industrial capabilities.

- Foreign sources and international cooperative development should be used where advantageous and within limitations of the law (DFARS Part 225).

- The Acquisition Strategy should promote sufficient program stability to encourage industry to invest, plan, and bear their share of risk. However, the strategy should not compel the contractor to use independent research and development funds or profit dollars to subsidize defense research and

development contracts, except in unusual situations where there is a reasonable expectation of a potential commercial application.

- Prior to completing or terminating production, the DoD Components should ensure an adequate industrial capability and capacity to meet post-production operational needs.

- Where feasible, acquisition strategies should consider industrial surge capability. Unfinanced but approved requirements are one category. A second category is munitions, spares, and troop support items. These are likely surge candidates and should receive close attention and specific planning, to include use of contract options. Surge capability can be included in evaluation criteria for contract award.

To satisfy 10 U.S.C. 2440, development of the acquisition strategy should include an analysis of the industrial base capability to design, develop, produce, support, and, if appropriate, restart an acquisition program. The approved Acquisition Strategy should include a summary of this analysis (see DoD Directive 5000.60 and DoD 5000.60-H).

Considerations for the analysis include the following:

- The analysis should identify DoD investments needed to create or enhance certain industrial capabilities;

- The analysis should identify the risk of industry being unable to provide program design or manufacturing capabilities at planned cost and schedule;

- If the analysis indicates an issue beyond the scope of the program, the program manager should notify the Milestone Decision Authority and Program Executive Officer ;

- When the analysis indicates that industrial capabilities needed by the Department of Defense are in danger of being lost, the DoD Components should determine whether government action is required to preserve the industrial capability;

- The analysis should also address product technology obsolescence, replacement of limited-life items, regeneration options for unique manufacturing processes, and conversion to performance specifications at the subsystems, component, and spares levels.

DoD Directive 5000.60 imposes oversight restrictions on any proposed action or investment to preserve an industrial capability for an acquisition program. Any such investment with an anticipated cost of equal to or less than $10 million annually must be approved by the appropriate milestone decision authority, and any investment with a cost greater than $10 million annually must be approved by the Under Secretary of Defense for Acquisition, Technology, and Logistics.

2.3.16.1.5. Small Business Innovation Research (SBIR) Technologies

The program manager should develop an acquisition strategy that includes the use of technologies developed under the SBIR program, and gives favorable consideration for funding of successful SBIR technologies. The Department of Defense maintains an on-line, searchable database of SBIR-funded technologies.

2.3.16.2. International Cooperation

The globalization of today's economy requires a high degree of coordination and international cooperation. Consistent with information security and technology transfer limitations, the program manager should consider the following:

2.3.16.2.1.   International Cooperative Strategy

The Acquisition Strategy should discuss the potential for increasing, enhancing, and improving the conventional forces of the North Atlantic Treaty Organization (NATO) and the United States, including reciprocal defense trade and cooperation, and international cooperative research, development, production, and logistic support. The Acquisition Strategy should consider the possible sale of military equipment. The discussion should specifically address the following four topics (10 U.S.C.2350a):

- Identification of similar projects under development or in production by a U.S. ally;

- Assessment of whether the similar project could satisfy U.S. capability needs or be modified in scope to satisfy the military need;

- Assessment of the advantages and disadvantages, with regard to program timing, developmental and life-cycle costs, technology sharing, and Rationalization, Standardization, and Interoperability, of seeking a cooperative development program; and

- The recommendation of the USD(AT&L) as to whether the Department of Defense should explore the feasibility and desirability of a cooperative development program.

The Milestone Decision Authority should review and approve the Acquisition Strategy for all programs at each acquisition program decision in accordance with 10 U.S.C. 2350a. All international considerations should remain consistent with the maintenance of a strong national technology and industrial base with mobilization capability. Restricted foreign competition for the program due to industrial base considerations requires prior USD(AT&L) approval. Results of the T&E of systems using approved international test operating procedures may be accepted without repeating the testing.

2.3.16.2.2.   International Interoperability

The growing requirement for effective international coalitions requires a heightened degree of international interoperability. Reciprocal trade, international standardization agreements, and international cooperative programs with allies and friendly nations serve that end. The acquisition community should strive to deploy and sustain systems, equipment, and consumables that are interoperable with our potential coalition partners.

2.3.16.2.3.   International Cooperation Compliance

To promote increased consideration of international cooperation and interoperability issues early in the development process, the program manager should discuss cooperative opportunities in the Acquisition Strategy at each acquisition program milestone (10 U.S.C. 2350a):

- Include a statement indicating whether or not a project similar to the one under consideration is in development or production by one or more major allies or NATO organizations.

- If there is such a project, provide an assessment as to whether that project could satisfy, or be modified in scope to satisfy, U.S. military capability needs.

- Provide an assessment of the advantages and disadvantages, with regard to program timing, life-cycle costs, technology sharing, standardization, and interoperability, of a cooperative program with one or more major allies or NATO organizations.

Program managers should seek the most efficient and cost-effective solution over the system's life cycle. Many times, the use or modification of systems or equipment that the Department already owns is more cost-effective and schedule-effective than acquiring new materiel.

Section 11.2. has additional details on international cooperation considerations.

2.3.16.2.4.   Testing Required for Foreign Military Sales

An Acquisition Category I or II system that has not successfully completed initial operational test and evaluation (IOT&E) requires USD(AT&L) approval prior to any foreign military sale, commitment to sell, or DoD agreement to license for export. This does not preclude Government-sponsored discussions of potential cooperative opportunities with allies, or reasonable advance business planning or marketing discussions with potential foreign customers by defense contractors, provided appropriate authorizing licenses are in place.

2.3.16.3. Contract Approach

The events set forth in contracts should support the exit criteria for the phase.

2.3.16.3.1.   Performance-Based Business Strategy

Consistent with a Performance-Based Business Environment, the acquisition strategy should include a performance-based business strategy.

2.3.16.3.2.   Modular Contracting

The program manager should use modular contracting, as described in FAR Section 39.103, for major IT acquisitions, to the extent practicable. Program managers should consider using modular contracting for other acquisition programs. (See also section 7.8.3.10.)

2.3.16.3.3.   Contract Bundling

Federal Acquisition Regulation 7.103(s) requires that acquisition planners, to the maximum extent practicable, avoid unnecessary and unjustified bundling that precludes small business participation as contractors. As a result of this direction, DoD Instruction 5000.2 requires a Benefit Analysis and Determination. The program manager should

consult the Office of Small and Disadvantaged Business Utilization website for additional information concerning this information requirement.

2.3.16.3.4. Major Contract(s) Planned

For each major contract planned to execute the acquisition strategy, the acquisition strategy should describe what the basic contract buys; how major deliverable items are defined; options, if any, and prerequisites for exercising them; and the events established in the contract to support appropriate exit criteria for the phase or intermediate development activity.

2.3.16.3.5. Multi-Year Contracting

In accordance with 10 U.S.C. 2306b, the acquisition strategy should address the program manager's consideration of multiyear contracting for full rate production, and address the program manager's assessment of whether the production program is suited to the use of multiyear contracting based on the requirements in FAR Subpart 17.1.

2.3.16.3.6. Contract Type

For each major contract, the acquisition strategy identifies the type of contract planned (e.g., firm fixed-price (FFP); fixed-price incentive, firm target; cost plus incentive fee; or cost plus award fee) and the reasons it is suitable, including considerations of risk assessment and reasonable risk-sharing by the Government and the contractor(s). The acquisition strategy should not include cost ceilings that, in essence, convert cost-type research and development contracts into fixed-price contracts or unreasonably cap annual funding increments on research and development contracts. Fixed-price development contracts of $25 million or more or fixed-price-type contracts for lead ships require the prior approval of the USD(AT&L) (DFARS Section 235.006), regardless of a program's Acquisition Category.

2.3.16.3.7. Contract Incentives

The Acquisition Strategy should explain the planned contract incentive structure, and how it incentivizes the contractor(s) to provide the contracted product or services at or below the established cost objectives. If more than one incentive is planned for a contract, the Acquisition Strategy should explain how the incentives complement each other and do not interfere with one another.

2.3.16.3.8. Integrated Contract Performance Management

The program manager should obtain integrated cost and schedule performance data to monitor program execution.

2.3.16.3.9. Special Contract Terms and Conditions

The Acquisition Strategy should identify any unusual contract terms and conditions and all existing or contemplated deviations to the FAR or DFARS.

2.3.16.3.10. Warranties

The program manager should examine the value of warranties on major systems and pursue them when appropriate and cost-effective. If appropriate, the program manager should incorporate warranty requirements into major systems contracts in accordance with FAR Subpart 46.7.

2.3.16.3.11. Component Breakout

The program manager should consider component breakout on every program, and break out components when there are significant cost savings (inclusive of Government administrative costs), the technical or schedule risk of furnishing Government items to the prime contractor is manageable, and there are no other overriding Government interests (e.g., industrial capability considerations or dependence on contractor logistics support). The Acquisition Strategy should address component breakout, and briefly justify the component breakout strategy (see DFARS Appendix D). It should list all components considered for breakout, and provide a brief rationale (based on supporting analyses from a detailed component breakout review (which shall not be provided to the Milestone Decision Authority unless specifically requested)) for those not selected. the program manager should provide the rationale for a decision not to break out any components.

2.3.16.4. Leasing

The program manager should consider the use of leasing in the acquisition of commercial vehicles and equipment whenever the program manager determines that leasing of such vehicles is practicable and efficient. Leases are limited to an annual contract with no more than a 5-month lease option.

The program manager may not enter into any lease with a term of 18 months or more, or extend or renew any lease for a term of 18 months or more, for any vessel, aircraft, or vehicle, unless the program manager has considered all costs of such a lease (including estimated termination liability) and has determined, in writing, that the lease is in the best interest of the Government (10 U.S.C. 2401a). It should be noted that a lease of more than 12 months does not permit the extension of one year funding authority.

Leases of equipment to meet a valid need under the provisions of CJCS Instruction 3170.01 will be categorized in accordance with the criteria in DoD Instruction 5000.2.

For further guidance on leasing, see Office of Management and Budget Circular A-11, Appendix B, *Budgetary Treatment of Lease-Purchases and Leases of Capital Assets*; and Office of Management and Budget Circular A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*.

2.3.16.5. Equipment Valuation

Equipment Valuation is a DoD initiative to value, capitalize, and depreciate DoD equipment. The activity will enable the Department of Defense to identify, track, and account for military assets, and assists in computing the net costs of operations.

2.3.16.5.1. Program Description

To implement this initiative, the program manager for any program, project, product, or system that has deliverable end items with a unit cost at or above $100,000 (the current *capitalization threshold*) should prepare a program description as part of the acquisition strategy at Milestone C. The program manager should calculate the unit cost by summing the estimated cost of the end item with the estimated costs of all associated government furnished equipment, training manuals, technical data, engineering support, etc., NOT including spares and support equipment. The description should identify the following deliverables:

- The end item(s) meeting the unit cost threshold (i.e., $100,000);
- The government furnished property that will be included in the end item;
- Other deliverables that will accompany the end item (e.g., manuals, tech data, etc.); and
- Other types of deliverables that will be bought with program funding (e.g., initial spares, support equipment, special tooling and test equipment, etc.) but that cannot be directly attributed to a specific end item.

2.3.16.5.2.   Accounting Review

The program manager should provide a copy of the program description to the accounting specialist who supports the accounting transactions for the program. The accounting specialist will review the description(s) and compare them to applicable federal accounting standards (e.g., Statement of Federal Financial Accounting Standard Number 23*)* and financial management regulations.

If the accounting specialist determines that the program will not deliver end items that fall within applicable accounting standards/regulation criteria, no further actions are needed. However, if the accounting specialist determines that the program will deliver end items that fall within applicable accounting standards/regulation criteria (i.e., the program is a "capital" program), the program manager must include a statement in the appropriate commitment documents and contract requisitions that these documents and requisitions are part of a capital program.

2.3.16.5.3.   Contract Implications

In addition to the statement in the commitment document and contract requisitions, the proposed statement of objectives must make clear which of the end items, GFP or other deliverables identified in the description required by paragraph 2.3.16.5.1 are within the scope of the proposed contract, i.e., which of the deliverables are to be procured by this contract.

Additional guidance for contracting officers will be provided separately.

2.3.17.Best Practices

In tailoring an acquisition strategy, the program manager should address management constraints imposed on contractors. Program managers should avoid imposing Government-unique restrictions that significantly increase industry compliance cost, or unnecessarily deter qualified contractors, including non-traditional defense firms, from

proposing. Examples of practices that support the implementation of these policies include Integrated Product and Process Development; performance-based specifications; management goals; reporting and incentives; a modular open systems approach that emphasizes modularity and use of commercially supported practices, products, performance specifications, and performance-based standards; replacement of Government-unique management and manufacturing systems with common, facility-wide systems; technology insertion for continuous affordability improvement throughout the product life cycle; realistic cost estimates and cost objectives; adequate competition among viable offerors; best value evaluation and award criteria; the use of past performance in source selection; results of software capability evaluations; Government-Industry partnerships consistent with contract documents; and the use of pilot programs to explore innovative practices. The Milestone Decision Authority should review best practices at each decision point. While not mandatory, program managers should not release Requests for Proposal until the Milestone Decision Authority has approved the Acquisition Strategy.

2.3.18.Relief, Exemption, or Waiver

The program manager should identify mandatory acquisition process requirements that fail to add value, are not essential, or are not cost effective, and seek the appropriate relief, exemption, or waiver.

2.3.19.Additional Acquisition Strategy Topics

The Acquisition Strategy should also briefly address the program manager's consideration of, decisions on, and planning for the following additional topics:

- **Program Office Staffing and Support Contractor Resources Available to the Program Manager.** The program manager should identify resource limitations that prevent the program manager from pursuing a beneficial acquisition strategy or contracting approach (e.g., component breakout (i.e., the Government contracts for a component and furnishes it to the prime contractor), or the use of an award fee contract). The program manager should provide an estimate of the additional resources needed to implement the desirable strategy or approach.

- **Integrated Digital Environment Management.** The program manager should summarize plans to establish a cost-effective data management system and digital environment consistent with paragraph 11.12.

- **Government Property in the Possession of Contractors Management.** *The program manager should* summarize the planned management of GPPC.

- **Simulation Based Acquisition and Modeling and Simulation.** The program manager should summarize the planned implementation of Simulation Based Acquisition and Modeling and Simulation during engineering, manufacturing, and design trade studies; and during developmental, operational, and live fire testing. (See 11.13.)

- **Software-Intensive Programs Review.** The program manager should describe the planned use of independent expert reviews for all Acquisition Category I through Acquisition Category III software-intensive programs.